

WHAT IS CLAIMED IS:

1                   1.       A method of reducing expression of a target gene in a cell, the  
2       method comprising the step of expressing in the cell an expression cassette comprising a  
3       promoter operably linked to a sense or antisense targeting sequence having substantial  
4       identity to at least a subsequence of the target gene, and an inverted repeat of a  
5       subsequence of an NOS gene, wherein the inverted repeat is heterologous to the targeting  
6       sequence, thereby reducing expression of the target gene.

1                   2.       The method of claim 1, wherein the inverted repeat is in a position  
2       3' to the targeting sequence.

1                   3.       The method of claim 1, wherein the inverted repeat is in a position  
2       5' to the targeting sequence.

1                   4.       The method of claim 1, wherein the inverted repeat is from the 3'  
2       untranslated region of the NOS gene.

1                   5.       The method of claim 4, wherein the inverted repeat is from the  
2       terminator region of the NOS gene.

1                   6.       The method of claim 1, wherein the inverted repeat is from the 5'  
2       untranslated region of the NOS gene.

1                   7.       The method of claim 1, wherein the inverted repeat is from the  
2       coding region of the NOS gene.

1                   8.       The method of claim 1, wherein the NOS gene is from an  
2       *Agrobacterium* sp.

1                   9.       The method of claim 1, wherein the inverted repeat comprises a  
2       sense region, a linker region, and an antisense region.

1                   10.      The method of claim 1, wherein the inverted repeat is from about  
2       30 to about 200 nucleotides in length.

1                   11.      The method of claim 1, wherein the targeting sequence is a sense  
2       sequence.

- 1                   12.    The method of claim 1, wherein the targeting sequence is an  
2 antisense sequence.
- 1                   13.    The method of claim 1, wherein the targeting sequence has  
2 substantial identity to a plant pathogen target gene.
- 1                   14.    The method of claim 13, wherein the targeting sequence is a viral  
2 sequence, a bacterial sequence, an insect sequence, a fungal sequence, or a nematode  
3 sequence.
- 1                   15.    The method of claim 1, wherein the targeting sequence has  
2 substantial identity to a plant target gene.
- 1                   16.    The method of claim 1, wherein the targeting sequence is from  
2 about 100 to about 1000 nucleotides in length.
- 1                   17.    The method of claim 1 wherein the targeting sequence is from a  
2 coding region of the target gene.
- 1                   18.    The method of claim 1, wherein the targeting sequence is from a 5'  
2 untranslated region of the target gene.
- 1                   19.    The method of claim 1, wherein the targeting sequence is from a 3'  
2 untranslated region of the target gene.
- 1                   20.    The method of claim 1, wherein the target gene is  
2 polygalacturonase.
- 1                   21.    The method of claim 1, wherein the promoter is a tissue specific  
2 promoter.
- 1                   22.    The method of claim 1, wherein the promoter is a plant promoter.
- 1                   23.    The method of claim 22, wherein the promoter is a cauliflower  
2 mosaic virus 35S promoter or a figwort mosaic virus 34S promoter.
- 1                   24.    The method of claim 1, wherein the cell is a plant cell.

1                   25.     The method of claim 24, wherein the plant is selected from the  
2 group consisting of wheat, corn, rice, sorghum, pepper, tomato, squash, banana,  
3 strawberry, carrot, bean, cabbage, beet, cotton, grape, pea, pineapple, potato, soybean,  
4 yam, and alfalfa.

1                   26.     The method of claim 1, wherein the expression cassette has a  
2 nucleotide sequence of SEQ ID NO:1.

1                   27.     The method of claim 1, wherein the targeting sequence comprises a  
2 premature stop codon that inhibits translation of the targeting sequence.

1                   28.     An expression cassette comprising a promoter operably linked to a  
2 sense or antisense targeting sequence having substantial identity to at least a subsequence  
3 of the target gene, and an inverted repeat of a subsequence of an NOS gene, wherein the  
4 inverted repeat is heterologous to the targeting sequence.

1                   29.     The expression cassette of claim 28, wherein the inverted repeat is  
2 in a position 3' to the targeting sequence.

1                   30.     The expression cassette of claim 28, wherein the inverted repeat is  
2 in a position 5' to the targeting sequence.

1                   31.     The expression cassette of claim 28, wherein the inverted repeat is  
2 from the 3' untranslated region of the NOS gene.

1                   32.     The expression cassette of claim 31, wherein the inverted repeat is  
2 from the terminator region of the NOS gene.

1                   33.     The expression cassette of claim 28, wherein the inverted repeat is  
2 from the 5' untranslated region of the NOS gene.

1                   34.     The expression cassette of claim 28, wherein the inverted repeat is  
2 from the coding region of the NOS gene.

1                   35.     The expression cassette of claim 28, wherein the NOS gene is from  
2 an *Agrobacterium* sp.

1                    36.        The expression cassette of claim 28, wherein the inverted repeat  
2       comprises a sense region, a linker region, and an antisense region.

1                    37.     The expression cassette of claim 28, wherein the inverted repeat is  
2     from about 30 to about 200 nucleotides in length.

1                    38.     The expression cassette of claim 28, wherein the targeting  
2     sequence is a sense sequence.

1                    39.     The expression cassette of claim 28, wherein the targeting  
2     sequence is an antisense sequence.

1           40.     The expression cassette of claim 28, wherein the targeting  
2     sequence has substantial identity to a plant pathogen target gene.

1                    41.        The expression cassette of claim 40, wherein the targeting  
2        sequence is a viral sequence, a bacterial sequence, an insect sequence, a fungal sequence,  
3        or a nematode sequence.

1           42.     The expression cassette of claim 28, wherein the targeting  
2     sequence has substantial identity to a plant target gene.

1           43.     The expression cassette of claim 28, wherein the targeting  
2     sequence is from about 100 to about 1000 nucleotides in length.

1           44.     The expression cassette of claim 28, wherein the targeting  
2     sequence is from a coding region of the target gene.

1           45.     The expression cassette of claim 28, wherein the targeting  
2     sequence is from a 5' untranslated region of the target gene.

1           46.     The expression cassette of claim 28, wherein the targeting  
2     sequence is from a 3' untranslated region of the target gene.

1           47.     The expression cassette of claim 42, wherein the target gene is  
2     polygalacturonase.

